

Solutions to Adolescent Depression and Anxiety: A Exercise Based Perspective

Wentao Song

Liyang High School of Jiangsu Province, Jiangsu,213300, China;

Abstract:

As the pace of society continues to accelerate, the frequency of mental fatigue and emotional stress that people feel in their daily lives is becoming more frequent, which has caused the prevalence of depression and anxiety to rise rapidly and has now reached alarming levels. According to the World Health Organization, a staggering 13% of the global adolescent population has been diagnosed with depression and anxiety, a silent epidemic that casts a long shadow over our youth. Based on the above background, this paper first discusses the changing dynamics of the prevalence of depression and anxiety among young people and its negative effects on them. Subsequently, the therapeutic effects of exercise are analyzed in terms of accessibility, affordability, and potential as a complementary or alternative treatment. Finally, this paper gives some suggestions for better prevention of depression and anxiety.

Keywords: depression and anxiety; adolescent; exercise.

1. Introduction

As the pace of society continues to accelerate, the frequency of mental fatigue and emotional stress that people feel in their daily lives is becoming more frequent, which has caused the prevalence of depression and anxiety to rise rapidly and has now reached alarming levels. Depression in teenagers is linked to a variety of physical health issues. The condition can manifest in somatic symptoms, such as headaches and stomachaches, which may be mistaken for purely physical ailments. As individuals and societies search for ways to combat these pervasive mental health issues, there has been a growing interest in the therapeutic potential of exercise. Beyond its well-documented physical benefits, exercise has emerged as a powerful tool for enhancing emotional well-being and fighting back against the negative effects of depression and anxiety. In an era where mental health has become a focal point of public concern, the search for effective treatments is more critical than ever. Based on the above background, this paper first discusses the changing dynamics of the prevalence of depression and anxiety among young people and its negative effects on them. Subsequently, the therapeutic effects of exercise are analyzed in terms of accessibility, affordability, and potential as a complementary or alternative treatment. Finally, this paper gives some suggestions for better prevention of depression and anxiety.

2. Depression in teenagers

Depression and anxiety are among the most prevalent mental health disorders globally, affecting individuals across all age groups and demographics. The WHO estimates that over 264 million people of all ages suffer from depression, while anxiety disorders affect approximately 7.3% of the global population. Among this population, teenagers stand out owing to the special life stage in which they are situated.

Adolescence, typically between the ages of 15 and 24, marks a critical juncture in human development characterized by rapid physical growth, emotional fluctuations, and the exploration of personal identity. This period is often considered the bridge between childhood and adulthood. According to the World Health Organization, a staggering 13% of the global adolescent population has been diagnosed with depression and anxiety. This silent epidemic casts a long shadow over our youth. The ripple effects of this mental health crisis are far-reaching and multifaceted, exerting a significant strain on the global healthcare system and imperiling the holistic development of our young minds. In response to this pressing issue, we must take the crucial first step of elevating mental health to the forefront of the global conversation, placing the imperative of raising awareness on our collective agenda (Marcus et al., 2012).

Depression in teenagers can manifest in various forms, from mild, transient feelings of sadness to severe, per-

sistent states that affect every aspect of life. Symptoms may include changes in appetite, sleep disturbances, feelings of worthlessness, and a loss of interest in previously enjoyed activities. Physically, the manifestations of depression and anxiety can include changes in sleep patterns, appetite, and energy levels, which can, over time, lead to more chronic health conditions. As undesirable as it might sound, suicide is listed as the fourth cause of death among youth aged 15 to 29.

Initiating with the very essence of adolescence, the internalization and intensification of stress can precipitate a cascade of mental health challenges, including the pervasive specter of anxiety and depression. These afflictions, insidious in their onset, have the potential to profoundly disrupt the daily rhythms of life and erode the foundational well-being of our young minds. The journey towards mental fortitude must begin with an introspective gaze, recognizing the silent struggles that can easily escalate into a formidable barrier to flourishing. Emotional stress and anxiety are among the most common causes of sleep disturbances. Worrying about work, relationships, or health can make falling or staying asleep difficult. Depression can affect sleep quality and duration, often causing insomnia or excessive sleepiness. Then, it can lead to a weakened immune system, making individuals more susceptible to various diseases and infections.

A significant association was observed between involvement in bullying and depressive symptoms. Specifically, youths who were frequently involved in bullying, either as perpetrators or as victims, were more than twice as likely to report depressive symptoms than those who were not involved in bullying (Saluja et al., 2004).

3. Psychotherapy and Medication

Both psychotherapy and drug therapy are part of the comprehensive treatment of mental health disorders, and there is a good complementarity between them. Comprehensive use of their respective advantages can effectively help solve the mental health problems of adolescents.

Psychotherapy, also known as talk therapy or counseling, is a therapeutic process that helps individuals address mental health issues, emotional challenges, and behavioral patterns. Therapy sessions typically involve the therapist asking questions and encouraging the patient to discuss their experiences, emotions, and thoughts. Psychotherapy has long been considered a practical and effective treatment for adolescent depression and anxiety. It has been approved for improving emotional well-being, self-esteem, and interpersonal skills. It is often used in conjunction with other treatments, such as medication.

From an evidence-based vantage point, cognitive-behavioral

therapy emerges as the preeminent therapeutic intervention for addressing the intricate tapestry of anxiety and depressive disorders in our children and adolescents. As we venture further into the realm of mental health research, our focus must be directed towards a comparative analysis of cognitive-behavioral psychotherapy with alternative treatment modalities. SNRIs, particularly duloxetine and milnacipran, are effective in managing fibromyalgia by providing significant relief from pain and enhancing the overall well-being of patients, with their efficacy being mood-independent (Lee et al.). SNRIs, venlafaxine, in particular, are associated with a notably higher risk of inducing hypertension, especially at a median dosage of 150 mg/day, and this risk is statistically significant (Wang et al., 2018).

4. Exercise as an Alternative

Exercise has been introduced as an alternative to traditional treatment approaches. It takes the form of sports, team sports, and aerobics. In recent years, there has been a growing interest in complementary and alternative therapies that offer natural, accessible, and cost-effective solutions. Weinstein and Meyers put forth the hypothesis that exercise may be a contributing factor in reducing depressive symptoms. They proposed that this could be due to an interplay between observable behavioral changes and alterations in cognitive processes (Weinstein et al., 1983).

4.1 Exercise in Building Physical Well-being

Regular physical activity helps the body align better with the external light-dark cycle, reinforcing the natural 24-hour circadian rhythm. For individuals needing to adjust to new time zones or work shifts, exercise can assist in regulating the body clock to adapt more quickly to new sleep-wake patterns (Fox et al. 411). Regular physical activity can contribute to better sleep patterns and improved sleep quality. Exercise is a comprehensive approach to health through nurturing the body's systems to function optimally. However, over-exercising could lead to problems in physical health and well-being. Excessive physical activity can injure joints, cause stress fractures, and lead to overuse injuries, among other issues. It can also result in hormonal imbalances, compromised immune function, and mental health challenges such as burnout and disordered eating patterns. It is crucial to strike a balance between different exercise types and seek guidance from healthcare professionals when initiating a new exercise regimen.

4.2 Exercise in Building Mental Well-being

Physical activity can act as a natural stress reliever by reducing the body's stress hormones, such as cortisol, and

promoting relaxation. Exercise stimulates the production of endorphins, which are neurotransmitters that create feelings of happiness and euphoria, often referred to as the “runner’s high.” The main findings were that regular exercise was associated with significant improvements in total well-being scores esp, especially in the well-being components of mood, sense of coherence, fortitude, stress, and coping (Edwards. 2006).

Regular exercise has been demonstrated to alleviate symptoms of depression by increasing serotonin and norepinephrine levels, which are neurotransmitters that regulate mood. Engaging in physical activity can help reduce anxiety by providing a healthy distraction and promoting a sense of calm and well-being. Exercise can help regulate sleep patterns, leading to better sleep quality, which is essential for mental health. Regular physical activity can enhance cognitive function, including memory, attention, and executive functions, which are crucial for mental agility and resilience. Attaining fitness goals and observing physical improvements can elevate self-esteem and confidence. Activities such as yoga or tai-chi necessitate focus and attention to the body’s movements, promoting mindfulness and presence in the moment.

Regular physical exercise has been shown to stimulate the growth of new brain cells, a process known as neurogenesis, and the formation of new neural connections, which contribute to enhancing brain plasticity. Furthermore, it has been demonstrated that regular physical activity can improve the ability to regulate emotions and respond to stress in a healthier way. In addition, overcoming physical challenges through exercise creates a sense of accomplishment, which further builds teenagers’ self-esteem.

4.3 Exercise in Promoting Social Relationships

Persistent physical inactivity in adolescents is associated with a less healthy lifestyle, worse social relationships, and poor self-perceived health conditions. Tailoring methods to promote physical activity may prove useful for cultivating a great relationship with others (Aarnio et al., 2002). Group exercises, such as team sports, dance classes, or group fitness sessions, naturally unite people and encourage interaction. A sports club or recreational league membership provides a structured environment for socializing and building friendships. Attendance at yoga, Pilates, or spinning classes can introduce individuals to a community of like-minded individuals. The pursuit of a shared fitness objective with others can engender a sense of camaraderie and mutual support. Online fitness communities and social media groups can provide encouragement, motivation, and a forum for sharing experiences. Participating in fitness challenges or friendly competitions

can be an enjoyable way to engage with others and foster friendly rivalries. Experienced exercisers can mentor beginners, sharing knowledge and providing guidance, which can strengthen social bonds. Forming or joining a support network for exercise can provide accountability, motivation, and a sense of belonging.

5. Conclusion

The essay has demonstrated the pivotal role of exercise in addressing the rising prevalence of mental health issues, particularly depression and anxiety among youth. It has been demonstrated that regular physical activity is associated with a substantially reduced risk for some, but not all, mental disorders. Furthermore, it appears to reduce the degree of co-morbidity. Further examination of the complex mechanisms and pathways underlying these associations may yield promising new research targets and procedures for targeted prevention (Strönle et al., 2004). The modern age, characterized by a relentless pace and stressors, has seen a surge in depression and anxiety, which can manifest in somatic symptoms and have profound impacts on the well-being of teenagers.

Based on the above analysis, this paper calls on society to widely recognize and utilize the potential of exercise in the treatment of psychological problems. Integrating exercise into daily life can help adolescents fight physical ailments, develop emotional resilience and cognitive agility, and help adolescents make good social connections. This approach can be seen as holistic to mental well-being in our youth by incorporating exercise into everyday life. Teens can develop a more resilient mindset and improve their ability to cope with complex depression. Individuals, communities, and healthcare providers should actively take action to promote exercise in mental health care.

References

- [1]. Aarnio, Marja, et al. “Associations of health related behaviour, social relationships, and health status with persistent physical activity and inactivity: a study of Finnish adolescent twins.” *British Journal of Sports Medicine* 36.5 (2002): 360-364.
- [2]. Compton, Scott N., et al. “Cognitive-behavioral psychotherapy for anxiety and depressive disorders in children and adolescents: an evidence-based medicine review.” *Journal of the American Academy of Child & Adolescent Psychiatry* 43.8 (2004): 930-959.
- [3]. Edwards, Steve. “Physical exercise and psychological well-being.” *South African journal of psychology* 36.2 (2006): 357-373.
- [4]. Fox, Kenneth R. “The influence of physical activity on mental well-being.” *Public health nutrition* 2.3a (1999): 411-418.

- [5]. Lee, Yee-Chi, and Phoon-Ping Chen. "A review of SSRIs and SNRIs in neuropathic pain." *Expert opinion on pharmacotherapy* 11.17 (2010): 2813-2825.
- [6]. Marcus, Marina, et al. "Depression: A global public health concern." (2012).
- [7]. Saluja, Gitanjali, et al. "Prevalence of and risk factors for depressive symptoms among young adolescents." *Archives of pediatrics & adolescent medicine* 158.8 (2004): 760-765.
- [8]. Ströhle, Andreas, et al. "Physical activity and prevalence and incidence of mental disorders in adolescents and young adults." *Psychological medicine* 37.11 (2007): 1657-1666.
- [9]. Wang, Sheng-Min, et al. "Addressing the side effects of contemporary antidepressant drugs: a comprehensive review." *Chonnam medical journal* 54.2 (2018): 101.
- [10]. Weinstein, Walter S., and Andrew W. Meyers. "Running as treatment for depression: is it worth it?." *Journal of Sport and Exercise Psychology* 5.3 (1983): 288-301.
- [11]. World Health Organization. "Adolescent health." https://www.who.int/health-topics/adolescent-health#tab=tab_1